

United States Patent and Trademark Office



APPLICATION NO.	FILING	DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,526	07/16/2003		Glen A. Mort	614359/82654	8986
7590 05/04/2005			EXAMINER		
Barnes & Tho			LOPEZ, FRANK D		
600 One Summit Square Fort Wayne, IN 46802			ART UNIT	PAPER NUMBER	
				3745	
			DATE MAILED: 05/04/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
		10/620,526	MORR ET AL.				
	Office Action Summary	Examiner	Art Unit				
		F. Daniel Lopez	3745				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
THE - External after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. It period for reply specified above is less than thirty (30) days, a repl or period for reply is specified above, the maximum statutory period for the reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status							
1)[🛛	Responsive to communication(s) filed on <u>04 F</u>	ebruary 2005.					
	<u> </u>	action is non-final.	•				
′=	Since this application is in condition for allowa		osecution as to the merits is				
·	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims						
4)⊠	Claim(s) 1-11 and 13-37 is/are pending in the	application					
	4a) Of the above claim(s) is/are withdrawn from consideration.						
	Claim(s) is/are allowed.						
· —	Claim(s) <u>1-11,13-28 and 30-37</u> is/are rejected.						
	Claim(s) <u>29</u> is/are objected to.						
_	Claim(s) are subject to restriction and/or election requirement.						
Applicati	on Papers						
9)[]	The specification is objected to by the Examine	ar.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
,	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.05(a).						
11)	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
	under 35 U.S.C. § 119						
_	Acknowledgment is made of a claim for foreign	priority under 35 LLS C S 140(a)	\ (d) or (f)				
_	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document)-(a) or (1).				
	2. Certified copies of the priority document	s have been received in Applicati	on No				
	3. Copies of the certified copies of the prio		ed in this National Stage				
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
		or the defined depics not receive					
Attachmen	t(s)						
	e of References Cited (PTO-892)	4) Interview Summary					
	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statemept(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da	ate Patent Application (PTO-152)				
Pape	r No(s)/Mail Date 3/22/05	6) Other:	atom repulsation (FTO*192)				

Response to Amendment

Applicant's arguments filed February 4, 2005, have been fully considered but they are not deemed to be persuasive.

Applicant's arguments with respect to claims and have been considered but are deemed to be moot in view of the new grounds of rejection. The new grounds of rejection was necessitated by the added limitation that "a seal located between the cap and the body" (claim 18 line 9-10), and amendments trying to overcome the 112 rejections.

Applicant argues that the set is a bearing, as discussed in the specification, and further argues that limiting the set to a spherical member is unduly limiting. The question becomes, how does a "bearing" further limit "set"? A bearing (i.e. a roller bearing or a ball bearing) is well known to be an element which supports one member relative to another member while allowing the relative movement between the two members. It appears that the set does not act as a bearing; therefore it is unclear how the limitation of a bearing is supposed to be interpreted. It was thought that the bearing was an indication of its shape. This claim must be rewritten, or explained, to show what limitation is meant by "bearing".

Applicant concludes that the amended claims are allowable over the cited prior art, but fails to discuss what elements make the claims allowable, and how these elements overcome the cited prior art. As discussed below, the examiner disagrees.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

Claims 1-11, 13-17, 21-23 and 25-27 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In claim 1 line 2-3 "a power supply; at least one piston movable in response to the power supply" is confusing grammatically. Suggest that this be replaced by --a supply of power; at least one piston movable in response to the supply of power--.

In claim 6 and 21 line 1-2 "a piston is attached to respective opposed portions of the cable" is wrong, since there are disclosed two pistons, a respective piston attached to each of opposed portions of the cable.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "bearing member" in claims 7, 22 and 23 is used by the claim to mean "spherical member", while the accepted meaning is "support member for a first element movable relative to a second member." The term is indefinite because the specification does not clearly redefine the term. Suggest that --spherical member-replace "bearing member" in claims 7, 22 and 23 line 2 and in the specification.

If applicant does not mean a spherical member, it is unclear what a limitation is to be associated with "bearing member". Applicant needs to specify what limitation is meant by "bearing member" which is not a limitation of a "set".

Claims not specifically mentioned are indefinite, since they depend from one of the above claims.

Claim Rejections - 35 USC § 102

Claims 31-37 are rejected under 35 U.S.C. § 102(b) as being anticipated by Walters (see discussion below).

Claims 1, 3, 5, 9, 13, 14, 17 and 37 are rejected under 35 U.S.C. § 102(b) as being anticipated by Gajek et al. The piston (20) moves a flexible member (25), which moves a pinion (B, fig 3 or 4).

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Claims 1, 3-14, 18, 19, 21-23, 25-27 and 30-37 are rejected under 35 U.S.C. § 102(b) as being anticipated by Akers. The piston (26) moves a flexible member (27), which moves a pinion (57), by way of a seal/fitting (65) fitting into a cavity of the pinion. A second piston (70) is attached to the other end of the flexible member.

Claims 1-5, 9, 13, 14, 18-20, 30 and 37 are rejected under 35 U.S.C. § 102(b) as being anticipated by Desmond. The piston (26) moves a flexible member (27), which moves a pinion (57), by way of a seal/fitting (65) fitting into a cavity of the pinion. A second piston (70) is attached to the other end of the flexible member.

Claim Rejections - 35 USC § 103

Claims 1-11, 13, 14 and 17 are rejected under 35 U.S.C. § 103 as being unpatentable over Walters in view of Gauthier. Walters discloses a rotary actuator comprising a longitudinally extending flexible member (one of lines 16) having a pair of opposed end, each end being attached to one of two pistons (e.g. 35, 38); a pinion (3, 5 or 7) fixed to the flexible member, wherein linear movement of the piston and flexible member causes rotational movement of the pinion; with a stop (e.g. guard shown in figure 9) engagable with the pinion to limit its movement; and with a seal (e.g. 50, fig 7; 112, fig 17c) between the piston and the pinion; but does not disclose that the flexible member is attached to the pinion by a fastener (set).

Gauthier teaches, for a rotary actuator comprising a longitudinally extending flexible member (10) fixed to a pinion (12), wherein linear movement of the piston and flexible member causes rotational movement of the pinion; that the flexible member is attached to the pinion by a fastener (38).

Since Walters does not show the details of how the flexible member is attached to the pinion and Gauthier does; it would have been obvious at the time the invention was made to one having ordinary skill in the art to attach the flexible member of Walters to the pinion by a fastener, as taught by Gauthier, as a matter of engineering expediency.

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Claims 18-21 and 24-27 are rejected under 35 U.S.C. § 103 as being unpatentable over Walters in view of Desmond. Walters discloses a rotary actuator comprising a longitudinally extending flexible member (one of lines 16) having a pair of opposed end, each end being attached to one of two pistons (e.g. 35, 38), slidable in a cap (e.g. housing 20); a pinion (3, 5 or 7) fixed to the flexible member, wherein linear movement of the piston and flexible member causes rotational movement of the pinion; with a stop (e.g. guard shown in figure 9) engagable with the pinion to limit its movement; and a seal (e.g. 50, fig 7; 112, fig 17c) between the piston and the pinion; but does not disclose that the seal is between the cap and a body.

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Desmond teaches, for a rotary actuator comprising a longitudinally extending flexible member (30) fixed to a pinion (23), wherein linear movement of a piston (29) in a cap (28) and flexible member causes rotational movement of the pinion; and a seal (35) between the piston and the pinion; that the seal is between the cap and a body (33).

Since the seals of Walters and Desmond are functionally equivalent in the rotary actuator art; it would have been obvious at the time the invention was made to one having ordinary skill in the art to locate the seal of Walters between the cap and a body, as taught by Desmond, as a matter of engineering expediency.

Conclusion

Claim 29 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 15 and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is (571)-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is (703) 872-9306. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

> F. Daniel Lopez **Primary Examiner**

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May 02, 2005